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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MAI, HAO D

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

04/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/810,553	Applicant(s) MASSOUD, YEHA A.	
	Examiner HAO D. MAI	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/28/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 11, 16-19, and 21, is withdrawn in view of the newly discovered reference(s). Finality issued in the previous Office Action of 11/19/2007 is withdrawn. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites limitation(s) to the treatment plan, which was not actively claimed. Claims 17-19 recite limitations to the cutting device, which was not actively claimed. Since the applicant fails to particularly point out and distinctly claim the treatment plan and/or the cutting device, any further limitations to them is indefinite. Accordingly, claims 16-17 fail to limit the preceding claim(s)

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Boukhris (6235035 B1).**

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Boukhris discloses a drill/bur (Fig. 1) capable of performing a Caldwell-Luc osteotomy to penetrate a lateral wall of a maxillary sinus of a patient comprising: an elongated shaft (E) having opposing first and second ends, said first end is capable of being inserted into a rotary device; a cutting blade (A) coupled to the second end of the shaft (E); and a depth guide (B) extending transversely from the shaft and spaced a predetermined distance (d) from the distal end of the cutting blade. The disclosed bur's depth guide (B) is capable of interfacing with a surgical guide comprising a curvilinear-shaped structure having a window.

Note that the surgical guide, the treatment plan, and their respective structural limitations are not given patentable weight because they were not actively claimed.

6. Claims 23-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Pompa (5320529).

Pompa discloses a method comprising the steps of: providing a treatment plan including a CT scan and 3D-imaging of maxillary sinus and maxillary bone structures of the patient (column 2 lines 60-63; column 4 lines 41-43; column 6 lines 19-43; column 7 lines 13-19); providing a surgical guide 16 having a window 38 that is shaped and dimensioned to correspond with the patient's maxillary sinus and maxillary bone structures (Fig. 5); placing the surgical guide over a portion of an alveolar ridge 20 and adjacent teeth (Fig. 5); cutting a portion of the maxillary bone 14 using a bur 17 traversing along a ledge forming window 38 (Fig. 5). As to claims 25 and 27, Pompa also disclose the step of providing computerized tomography of the maxillary bone and sinus and the associate wall shapes, dimensions, etc. (column 7 lines 13-19). As to claim 26, the bur 17 is shown to have a depth guide 17 set at a predetermined distance

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from the distal end of the cutting blade (Fig. 5). As to claim 28, the surgical guide 16 is shown to be fabricated of a curvilinear-shaped structure.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boukhris (6235035 B1).**

Boukhris discloses the invention substantially as claimed. However, Boukhris is silent to the depth guide traverses the shaft a distance in a range of approximately 5-10 mm from the distal end of the cutting blade. Nevertheless, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Boukhris by making the depth guide at a distance of approximately 5-10 mm from the distal end of the cutting blade since such modification is well within the skill of an artisan obtained via routine experimentation in order to achieve optimum results. In re Aller. MPEP § 2144.05.

9. **Claims 8-15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenberg (5558622).**

Greenberg discloses a surgical guide 54 comprising: a curvilinear-shaped structure 56 having a window 60 (Fig. 4). The claim language "for performing a

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Caldwell-Luc osteotomy to penetrate a lateral wall of a maxillary sinus of a patient...", "for placement adjacent the lateral wall of the maxillary sinus...", "for exposing a corresponding portion of the lateral wall of the maxillary sinus to perform the osteotomy", etc., merely recites intended uses. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The surgical guide 54 as disclosed by Green is capable of being used for performing a Caldwell-Luc osteotomy to penetrate a lateral wall of a maxillary sinus of a patient; the curvilinear-shaped structure 56 is capable of being placed adjacent the lateral wall of the maxillary sinus; and the window 60 is capable of exposing a corresponding portion of the lateral wall of the maxillary sinus to perform the osteotomy.

Greenberg discloses the invention as claimed in claim 8 except for said curvilinear structure and window being dimensioned and shaped based on a treatment plan for the patient that includes a CT scan and three-dimensional imaging which characterizes a plurality of walls defining the maxillary sinus and maxillary bone of the patient in three dimensions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the surgical guide being shaped and dimensioned to perform the intended treatment plan, since a change in shape and/or dimension are merely design choice well within the skill of the artisan.

Regarding claim 9, the curvilinear-shaped structure 56 is shown to include a lower portion having a surface 59 (Fig. 4) capable of being positioned over at least one of a portion of an alveolar ridge of the maxillary bone and adjacent teeth of said patient; and an upper portion (where 56 is shown in Fig. 4) extending upward from the lower

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portion surface capable of being positioned adjacent to the lateral wall of the maxillary sinus.

Regarding claims 10-11, and 13, the upper portion is shown to include the rectangular window 60, which is being formed by a plurality of peripheral edges (Fig. 4) that define a surrounding ledge capable of interacting with/receiving a cutting device/drill D (Fig. 17). The surrounding ledge is capable of being positioned at the corresponding portions of the sinus as claimed, defining an outline to perform the osteotomy. As to claim 11, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the ledge of a suitable and optimum thickness.

Regarding 12, Greenberg fails to disclose the curvilinear-shaped structure being made from an acrylic material. However, It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the structure from an acrylic material since it is a suitable material that can be used to manufacture such structure.

Regarding claims 14-15, the peripheral edges defining the window are capable of providing an outline of the claimed aspects and planes as needed to perform the osteotomy.

Response to Arguments

10. Applicant's arguments filed 02/19/2008 have been considered but are moot in view of the new ground(s) of rejection. Generally, the claims, particularly the apparatus claims 8-22, currently contain much functional language that conveys no patentable weight.

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Conclusions

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAO D. MAI whose telephone number is (571)270-3002. The examiner can normally be reached on Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hao D Mai/
Examiner, Art Unit 3732

**/John J Wilson/
Primary Examiner, Art Unit 3732**